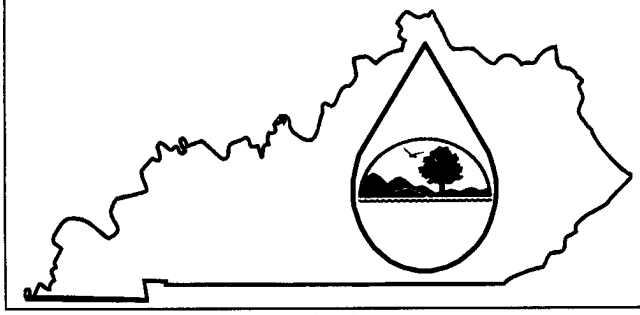
KPDES FORM 1

AI# 104701



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

RECEIVED
JUN 08 2009
BY

PERMIT APPLICATION

This is an application to: (check one)

- ☐ Apply for a new permit.
- ☐ Apply for reissuance of expiring permit.
- ☒ Apply for a construction permit.
- ☐ Modify an existing permit.
  Give reason for modification under Item II.A.

A complete application consists of this form and one of the following:
Form A, Form B, Form C, Form F, or Form SC

For additional information contact:
KPDES Branch (502) 564-3410

I. FACILITY LOCATION AND CONTACT INFORMATION	AGENCY USE: 0 1 0 7 9 6 4
A. Name of Business, Municipality, Company, Etc. Requesting Permit Kentucky Transportation Cabinet	
B. Facility Name and Location	C. Primary Mailing Address (all facility correspondence will be sent to this address). **Include owner's mailing address (if different) in D.**
Facility Location Name: CR 5280/ CR 1280 over Whipporwill Creek Logan County, KY	Facility Contact Name and Title: Mr. ☒ Ms. ☐ David M. Waldner, P.E
Facility Location Address (i.e. street, road, etc., **not P.O. Box**): CR 5280/ CR 1280 over Whipporwill Creek	Mailing Address: 200 Mero Street
Facility Location City, State, Zip Code: CR 5280/ CR 1280 over Whipporwill Creek 3.3 miles south east of KY 79	Mailing City, State, Zip Code: Frankfort, KY 40622
D. Owner's name (if not the same as in part A and C): N/A	Facility Contact Telephone Number: (502) 564-7250
Owner's Mailing Address: N/A	Owner's Telephone Number (if different): N/A

II. FACILITY DESCRIPTION

A. Provide a brief description of activities, products, etc: The purpose of this project is to replace an exisiting bridge over Whipporwill Creek in Logan County on CR5280. Bridge replacement is needed due to the existing bridge having a low sufficiency rating and the deck being in poor condition.

B. Standard Industrial Classification (SIC) Code and Description

Principal SIC Code & Description:	1622 - Bridge Construction		
Other SIC Codes:	1611 - Linear Projects	N/A	N/A

III. FACILITY LOCATION

A. Attach a U.S. Geological Survey 7 ½ minute quadrangle map for the site. (See instructions)	
B. County where facility is located: Logan	City where facility is located (if applicable): N/A
C. Body of water receiving discharge: Whipporwill Creek	
D. Facility Site Latitude (degrees, minutes, seconds): 36°43'43" N	Facility Site Longitude (degrees, minutes, seconds): 86°59'05" W
E. Method used to obtain latitude & longitude (see instructions):	Topographic Map Coordinates Quad: Dot
F. Facility Dun and Bradstreet Number (DUNS #) (if applicable):	N/A

IV. OWNER/OPERATOR INFORMATION

A. Type of Ownership:
☐ Publicly Owned ☐ Privately Owned ☒ State Owned ☐ Both Public and Private Owned ☐ Federally owned

B. Operator Contact Information (See instructions)

Name of Treatment Plant Operator:	Telephone Number:
N/A	N/A
Operator Mailing Address (Street): N/A	
Operator Mailing Address (City, State, Zip Code): N/A	
Is the operator also the owner? Yes ☐ No ☐	Is the operator certified? If yes, list certification class and number below. Yes ☐ No ☐
Certification Class: N/A	Certification Number: N/A

V. EXISTING ENVIRONMENTAL PERMITS

Current NPDES Number:	Issue Date of Current Permit:	Expiration Date of Current Permit:
N/A	N/A	N/A
Number of Times Permit Reissued:	Date of Original Permit Issuance:	Sludge Disposal Permit Number:
N/A	N/A	N/A
Kentucky DOW Operational Permit #:	Kentucky DSMRE Permit Number(s):	
N/A	N/A	N/A

Which of the following additional environmental permit/registration categories will also apply to this facility?

CATEGORY	EXISTING PERMIT WITH NO.	PERMIT NEEDED WITH PLANNED APPLICATION DATE
Air Emission Source	N/A	N/A
Solid or Special Waste	N/A	N/A
Hazardous Waste - Registration or Permit	N/A	N/A

VI. DISCHARGE MONITORING REPORTS (DMRs)

KPDES permit holders are required to submit DMRs to the Division of Water on a regular schedule (as defined by the KPDES permit). Information in this section serves to specifically identify the name and telephone number of the DMR official and the DMR mailing address (if different from the primary mailing address in Section I.C).

A. DMR Official (i.e., the department, office or individual designated as responsible for submitting DMR forms to the Division of Water):	Mr. Dave Harmon
DMR Official Telephone Number:	502-564-7250

B. DMR Mailing Address:
- Address the Division of Water will use to mail DMR forms (if different from mailing address in Section I.C), or
- Contact address if another individual, company, laboratory, etc. completes DMRs for you; e.g., contract laboratory address.

DMR Mailing Name:	N/A
DMR Mailing Address:	N/A
DMR Mailing City, State, Zip Code:	N/A

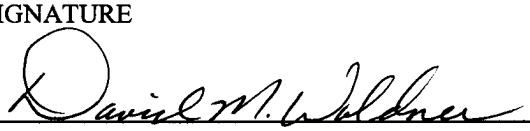
VII. APPLICATION FILING FEE

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount (for permit renewals, please include the KPDES permit number on the check to ensure proper crediting). Descriptions of the base fee amounts are given in the "General Instructions."

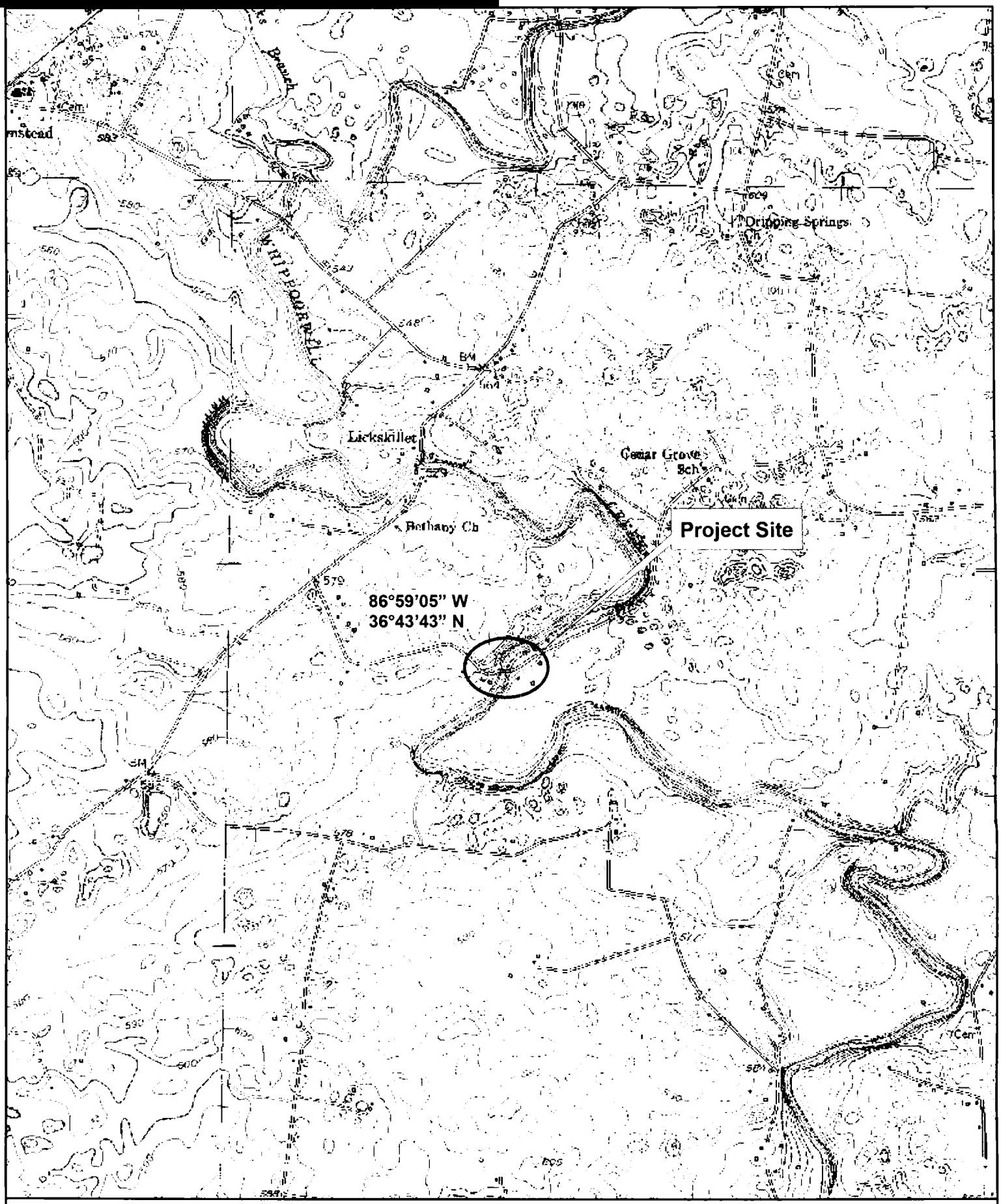
Facility Fee Category:	Filing Fee Enclosed:
	$0

VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

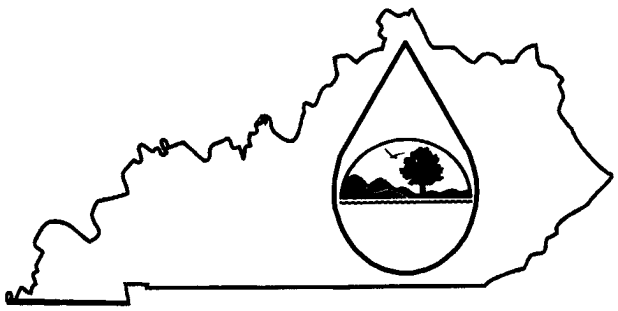
NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Mr. ☒ Ms. ☐ David M. Waldner, Director of DEA	502-564-7250
SIGNATURE 	DATE: 6/8/09

Return completed application form and attachments to: **KPDES Branch, Division of Water, Frankfort Office Park, 14 Reilly Road, Frankfort, KY 40601. Direct questions to: KPDES Branch at (502) 564-3410.**



Cedar Grove Rd - CR 5280
Logan County, KY

KPDES FORM F



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, Contact KPDES Branch, (502) 564-3410.

I. OUTFALL LOCATION	AGENCY USE							

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and name the receiving water.

A. Outfall Number	B. Latitude	C. Longitude	D. Receiving Water (name)	D. Receiving Water use Classification
1	36°43'44" N	86°59'6" W	Whippoorwill Creek	Exceptional Waters/ Reference Reach/ Outstanding State Water
2	36°43'44" N	86°59'5" W	Whippoorwill Creek	Exceptional Waters/ Reference Reach/ Outstanding State Water
3	36°43'43" N	86°59'5" W	Whippoorwill Creek	Exceptional Waters/ Reference Reach/ Outstanding State Water
4	36°43'44" N	86°59'7" W	Unnamed tributary to Whippoorwill Creek	Warm Water Aquatic Habitat, Primary Contact Recreation, Secondary Contact Recreation and Domestic Water Supply
5	36°43'44" N	86°59'5" W	Whippoorwill Creek	Exceptional Waters/ Reference Reach/ Outstanding State Water

II. IMPROVEMENTS

A. Are you now required by any federal, state, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls No.	2. Affected Outfalls Source of Discharge	3. Brief Description of Project	4. Final Compliance Date a. req.	4. Final Compliance Date b. proj.
N/A	N/A	N/A	N/A	N/A	N/A

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. SITE DRAINAGE MAP

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each know past or present areas used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage of disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

IV. NARRATIVE DESCRIPTION OF POLLUTANT SOURCES

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
#1	0.3 acres	7.0 acres	#4	0.09 acres	0.15 acres
#2	0.2 acres	0.4 acres	#5	0.008 acres	0.864 acres
#3	0.2 acres	33 acres			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

During the construction of roadways and bridges, the main pollutant of concern is sediment associated with land disturbing activities. Typical pollutants associated with a roadway and bridge once they are is use include the following:

- Heavy metals from tire tread and brake linings
- pH from road treatment operations during freezing weather
- Petrochemicals from auto leaks
- TSS from dirt and debris that is transported by tires

The associated BMP Template and Supplemental Data discuss how these pollutants will be addressed.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table F-1
#1	Sedimentation basin EPSC and enhanced silt trap and turf reinforcement mat swales post-construction	4 – A
#2	Sedimentation basin EPSC and turf reinforcement mat swales post-construction	4 – A
#3	Sedimentation basin EPSC and turf reinforcement mat swales post-construction	4 – A
#4	Minimal drainage; seeded and mulched swale post-construction	4 – A
#5	Minimal drainage; seeded and mulched swale post-construction	4 - A

V. NON-STORM WATER DISCHARGES

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-storm water discharges, and that all non-storm water discharges from these outfall(s) are identified in either an accompanying Form C or Form SC application for the outfall.

Name and Official Title (type or print)	Signature	Date Signed
David M. Waldner, Director of DEA	David M. Waldner	6/8/09

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

N/A

VI. SIGNIFICANT LEAKS OR SPILLS

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

N/A. Construction project.

VII. DISCHARGE INFORMATION

A,B,C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables F-1, F-2, and F-3 are included on separate pages.

E: Potential discharges not covered by analysis - is any toxic pollutant listed in Table F-2, F-3, or F-4, a substance which you currently use or manufacture as an intermediate or final product or by product.

☐ Yes (list all such pollutants below) ☒ No (go to Section IX)

N/A

VIII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (list all such results below) ☒ No (go to Section IX)

N/A Construction Project.

IX. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in item VII performed by a contract laboratory or consulting firm?

☐ Yes (list the name, address and telephone number of, and pollutants analyzed by each such laboratory or firm below; use additional sheets if necessary).

☒ No (go to Section IX)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
N/A	N/A	N/A	N/A

XIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

NAME & OFFICIAL TITLE (type or print)	AREA CODE AND PHONE NO.
Mr. ☒ Ms. ☐ David M. Waldner	502-564-7250
SIGNATURE	**DATE SIGNED**
David M. Waldner	12/8/09

VII. DISCHARGE INFORMATION	OUTFALL NO:

Part A - **You must provide the results of at least one analysis for every pollutant in this table.** Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1st 20 Minutes	Flow-weighted Composite		
Oil and Grease		N/A				
Biological Oxygen Demand BOD_5						
Chemical Oxygen Demand (COD)						
Total Suspended Solids (TSS)						
Total Kjeldahl Nitrogen						
Nitrate plus Nitrite Nitrogen						
Total Phosphorus						
pH	Minimum	Maximum	Minimum	Maximum		

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's KPDES permit for its process wastewater (if the facility is operating under an existing KPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1st 20 Minutes	Flow-weighted Composite		

Part C - List each pollutant shown in Tables F-2, F-3, and F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1st 20 Minutes	Flow-weighted Composite		

Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow-weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gal/min or specify units)	6. Total flow from rain event (gallons or specify units)

7. Provide a description of the method of flow measurement or estimate.

KENTUCKY
TRANSPORTATION
CABINET

KPDES Individual Permit
Supplemental Data

Bridge Replacement over
Whippoorwill Creek (CR 5280)

Stantec

Kentucky
UNBRIDLED SPIRIT

May 6, 2009

Table of Contents

1.0 PROJECT BACKGROUND 1.1

2.0 ENVIRONMENTAL CONSIDERATIONS 2.2
2.1 SPECIAL CONSIDERATIONS 2.2
2.1.1 Environmentally Sensitive Features 2.2
2.1.2 Pollutants of Concern 2.2
2.1.3 Threatened and Endangered Aquatic Species 2.2
2.2 EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) SWPPP 2.2
2.2.1 Design Storms 2.3
2.2.2 Enhanced/Site Specific BMPs 2.3

3.0 ANTIDEGRADATION 3.5
3.1 PUBLIC NOTICE 3.5
3.2 ALTERNATIVES EVALUATION 3.5
3.3 POST-CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN 3.5
3.3.1 Post-construction SWPPP 3.5
3.3.2 Effort to Minimize Discharges 3.7
3.3.3 Evaluation of Alternative Discharge Locations 3.7
3.3.4 Alternative Post-Construction BMPs 3.7
3.4 ASSESMENT OF JUSTIFIABLE RISK 3.7
3.5 SOCIOECONOMIC DEMONSTRATION 3.7

1.0 Project Background

The Kentucky Transportation Cabinet (KYTC) is proposing replacement of the Cedar Grove Bridge (CR 5280) and approaches over Whippoorwill Creek in Logan County The project site is located within KYTC District 3 about 3.3 miles southeast of KY 79 near the Town of Lickskillet.

KYTC conducted an integrity assessment, which assigns a value from one (1) to one hundred (100), for this bridge on CR 5280. The bridge received a value of 22. Since the score is below fifty (50), the bridge was placed on a replacement list. The bridge assessment value in conjunction with the need to improve pass-ability across the bridge was why KYTC selected this bridge for replacement.

Whippoorwill Creek is classified as a "special use water" by the Kentucky Division of Water, and more specifically an "exceptional water", "reference reach water", and an "outstanding state resource water" as shown in 401 KAR 5:030 Section 3(2). Reference reach waters are waters that are least impacted within an ecoregion and provide an estimate of attainable conditions for similar streams within the same ecoregion and watershed. Due to this classification special considerations during design, construction, and post-construction have and will be observed. These considerations include but, are not limited to, the use of enhanced Best Management Practices (BMPs) during construction and installation of enhanced BMPs for post-construction.

2.0 Environmental Considerations

This section describes the activities that KYTC has implemented to address environmental concerns.

2.1 SPECIAL CONSIDERATIONS

2.1.1 Environmentally Sensitive Features

The two environmentally sensitive features for this project includes Whippoorwill Creek, an "exceptional water", "reference reach water" and "outstanding state resource water" and a sinkhole at Station 18+70, which is in the roadbed and will be capped.

2.1.2 Pollutants of Concern

The main pollutant of concern for this project is sediment. Whippoorwill Creek contains existing eroded banks as well as the potential for more erosion during construction. During the construction of this project BMPs will be implemented to minimize sediment from the construction site. In addition, river bank stabilization will be implemented to reduce streambank erosion.

2.1.3 Threatened and Endangered Aquatic Species

Littlewing pearly mussel and slabside pearly mussel are listed on the Kentucky Fish and Wildlife endangered species list within this reach of the creek. The KYTC DEA received a letter from the U.S. Fish and Wildlife Service (copy attached) stating that they concur with the Biological Assessment determination that the project is "not likely to adversely affect" these and other terrestrial and plant species. The letter also stated that the requirements of section 7 of the Act have been fulfilled.

2.2 EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) SWPPP

The following site specific EPSC BMPs have been developed specifically for this project. These BMPs are over and above the standard EPSC BMPs, as indicated in the table below. The remainder of the EPSC BMPs will be represented in KYTC's SWPPP, which is jointly developed with the resident engineer and the Contractor and incorporates the Contractor's means and methods. These site-specific BMPs are also included in the EPSC BMP Template.

Area to be Treated	Standard BMP	Enhanced/Site Specific BMP
1 – Banks of Whippoorwill Creek	Channel lining.	Channel lining with container plants on the right bank and streambank stabilization with live stakes on the left bank
2 – Drainage channel north of the new road and west of the creek	Silt traps	Silt traps and sedimentation basin
3 – Drainage channel south of the new road and east of the creek	Silt traps	Silt traps and sedimentation basin
4 – Drainage channel north of the new road and east of the creek	Silt traps	Silt traps and sedimentation basin
5 – Drainage channel north of existing road and east of the creek	Silt traps	Silt traps and sedimentation basin

2.2.1 Design Storms

EPSC BMPs will be designed to properly function at a 2-year/24-hour design storm.

2.2.2 Enhanced/Site Specific BMPs

The following enhanced/site specific EPSC BMPs will be utilized on this project. These BMPs include both structural and non-structural measures. The structural BMPs are shown on the Plan drawings, contained in Attachment A. All BMPs are in accordance with Sections 212 (Erosion Control) and 213 (Water Pollution Control) of KYTC's 2008 Standard Specifications.

Structural

- Sedimentation basins: designed hydraulically for a 2-year/24-hour storm.
- Existing streambank stabilization: the existing streambanks along the Whippoorwill Creek within the project site are steep and unstable. The banks will be stabilized as noted above. This work will be required at the outset of the project.

Non-structural

- Appropriate stock of straw ECB shall be available onsite at all times.
- Straw ECB shall be applied within 24 hours of the cessation of the land disturbing activity.
- Disturbed areas shall be stabilized prior to a rain event.
- EPSC/SWPPP inspections will be performed at least twice a week and within 24 hours of a 0.5" or greater rain event.
- Sediment control BMPs will be maintained when the sediment reaches 1/3 the depth of the BMP.

3.0 Antidegradation

3.1 PUBLIC NOTICE

The Kentucky Division of Water will public notice the draft permit and allow a pubic comment period of at least thirty (30) days. The notice shall be published in a daily or weekly newspaper within the area affected by the activity.

3.2 ALTERNATIVES EVALUATION

Three alternatives were evaluated during a NEPA study for this project. The three alternatives were:

- Replace the bridge with a realignment that would eliminate the near stop condition that exists with the current alignment because of the sharp curve and have the roadway and bridge meet current standards.
- Replace the bridge in its existing location and not correct the multiple sharp curves.
- Do nothing.

The first alternative was chosen because it improves travel safety through this area and it has minimal adverse impact to receiving waters.

3.3 POST-CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN

Post-construction BMPs are designed to provide long-term stormwater management to efficiently and effectively treat stormwater runoff from project sites. Post-construction BMPs treat stormwater runoff and reduce peak flows to pre-project conditions or lower. Typically, post-construction BMPs are designed to manage the first flush of runoff, meaning that it will treat the initial concentration of contaminated runoff. The pollutant concentration in the first flush is typically greater than subsequent runoff volumes in the same wet weather event. Post-construction BMPs may be designed per water quality and/or water quantity requirements.

3.3.1 Post-construction SWPPP

The following post-construction BMPs are proposed to be used on the project:

- Turf reinforcement mats: TRMs will be used in areas of concentrated flow within the project limits.
- Bank stabilization with channel lining and container plantings: The existing right bank will likely become unstable when the bridge pier is installed, so the right bank will be stabilized with channel lining and live container plantings. Container plantings will be

used for summer planting to ensure survivability. The channel lining will provide short-term stabilization and the plantings will provide long-term stabilization. The main planting selection criteria were whether the plantings were native species and that they did not get any taller than about 20 feet to prevent any concerns with limbs falling onto the road.

- Bank stabilization with live stakings: The existing left bank of Whippoorwill Creek within the project area is incised and unstable. The banks will be stabilized by sloping them back at about a 2:1 slope, seeding and mulching, and covering with an erosion control blanket. This will provide temporary stabilization. During the early spring, live stakes will also be placed to provide for long-term stabilization. The main vegetation selection criteria were whether the stakes were native species and that they did not get any taller than about 20 feet to prevent any concerns with limbs falling onto the road.

- Bank stabilization under the new bridge: Because vegetation will not grow well under the new bridge due to lack of sunlight, the banks will be stabilized with channel lining.

- Enhanced silt trap: The flow from north of the new road and west of the bridge will be handled with a series of enhanced silt traps. These will be used to control grade, reduce velocity, and capture silt from headwaters before reaching Whippoorwill Creek.

These BMPs are over and above the standard post-construction BMPs, as indicated in the table below.

Area to be Treated	Initial BMP	Enhanced/Site Specific BMP
1 – Banks of Whippoorwill Creek	None	Right – Channel lining with container plantings Left- Erosion control blanket and live stakings
2 – Drainage channel north of the new road and west of the creek	Rock lined channel	Turf reinforcement mat and enhanced silt traps
3 – Drainage channel south of the new road and east of the creek	Rock lined channel	Grassed swales and rock lined channel at outlet
4 – Drainage channel north of the new road and east of the creek	Rock lined channel	Grassed swales and rock lined channel at the outlet
5 – Drainage channel north of existing road and east of the creek	None	Grassed swales and rock lined channel at the outlet

The following plant species can be used for this project:

Common Name	Scientific Name	Max Height	Soil Conditions
Coral Berry	*Symphoricarpos orbiculata*	5 feet	Dry
Silky Dogwood	*Cornus amomum*	9 feet	Mesic - Wet
Elderberry	*Sambucus canadensis*	8 feet	Mesic - Wet
Carolina Willow	*Salix caroliniana*	12 feet	Wet
Silky Willow	*Salix sericea*	15 feet	Wet
Buttonbush	*Cephalanthus occidentalis*	8 feet	Wet (near edge of water

3.3.2 Effort to Minimize Discharges

During the design of this project, consideration was given to reducing the number of discharge locations. This effort led to allowing sheet flow to occur south of the new road and west of the creek.

3.3.3 Evaluation of Alternative Discharge Locations

The project was evaluated for alternative discharge locations. Due to the topography of the site and the short extent of the project, there were not other viable alternatives.

3.3.4 Alternative Post-Construction BMPs

Various post-construction BMPs were considered for this project. The ones selected were chosen because of the soil type, the available area, the topography and the amount of flow to manage.

3.4 ASSESMENT OF JUSTIFIABLE RISK

This project will be replacing a bridge that has reached the end of its useful life and removing sharp curves in CR 5280, which will lead to safer passage through this portion of the road.

3.5 SOCIOECONOMIC DEMONSTRATION

The following questions were addressed to demonstrate the socioeconomic considerations for this project.

Describe the effect of the project on the employment of the area. The proposed project will allow the traveling public and local residents safer and more efficient access to employment opportunities within the project area by replacing a substandard bridge with a modern bridge that meets current design standards. The project will also provide opportunities for local residents to realize economic benefit by employment opportunities during the construction and maintenance of the facility.

Describe how the project will increase or avoid the decrease of area employment. Due to the nature of employment in the area, the proposed project will likely have a negligible affect on employment but will allow area residents to maintain employment by allowing the traveling public to continue to maintain access to employment opportunities.

Describe the project's industrial or commercial benefits to the community. The project will benefit the community both short-term and long-term. Short-term benefits will be realized through employment during the construction phase of the project. Local and regional businesses may also enjoy economic benefits from contractors and their employees purchasing materials, goods, and services in the project area. The community and region may experience long-term benefits from the project as maintenance, bridge inspections, and other activities associated with the maintenance of the facility require materials, goods, and services to be purchased.

Describe any other economic or social benefits the project will have to the community. Because the project consists of a slight roadway re-alignment as part of the bridge replacement, there are not any other anticipated economic or social benefits to the community.

How many and in what manner will households be economically or socially impacted? There is an anticipated six jobs that will be developed during the construction and maintenance of the project. Therefore, up to six households in the area will be economically benefited by new employment or better employment.

		YES	NO
1.	Will this project be likely to change median household income in the area?	☐	☒
2.	Will this project likely change the market value of taxable property in the area?	☐	☒
3.	Will this project increase revenues in the area?	☐	☒
4.	Will any public buildings be affected by this project?	☐	☒

Kentucky Transportation Cabinet

Highway District 3

And

_____(2), Construction

Kentucky Pollutant Discharge Elimination System
Permit KYR10
Best Management Practices (BMP) Plan

Groundwater Protection Plan

For Highway Construction Activities

For

Bridge Replacement over Whippoorwill Creek (CR5280)

Contract ID ######

Six Year Plan 3-1066

Revised
5-06-09

Project Information

Note – (1) = Design (2) = Construction (3) = Contractor

1. Owner – Kentucky Transportation Cabinet, District 3
2. Resident Engineer: (2)
3. Contractor Name: (2)
   Address: (2)
   Phone number: (2)
   Contact: (2)
   Responsible Person: (3)
4. Contract ID Number: (2)
5. Route (Address): CR 5280
6. Latitude/Longitude (project mid-point) 36°43'43"N,86°59'05"W
7. County (project mid-point): Logan County
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

1.0 SITE DESCRIPTION.

1) Nature of construction activity (from letting project description). Project is a bridge replacement project with re-alignment of the existing road to remove multiple sharp curves. The bridge is over Whippoorwill Creek on CR 5280 in Logan County, KY.
2) Order of major soil disturbing activities. (2) and (3)
3) Projected volume of material to be moved. 9465 cubic yards
4) Estimate of total project area (acres). 3.1 acres
5) Estimate of area to be disturbed (acres). 1.9 acres
6) Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information. (1)
7) Data describing existing soil condition. According to the 2007 Soil Survey Geographic database for Logan, Kentucky, the soils within this region consist primarily of Allegheny Loam (40%), Baxter Cherty Silt Loam (19%), Pembroke Silt Loam (18%), Pickwick Silty Clay (10%), and Talbott – Colbert Rocky silt loam (3%). (1)
8) Data describing existing discharge water quality (if any). Existing discharge is in the form of point discharges with little to no BMPs associated with them.
9) Receiving water name. Whippoorwill Creek
10) TMDLs and Pollutants of Concern in Receiving Waters. There are no TMDLs in this section of Whippoorwill Creek. However, this section of Whippoorwill Creek is a reference reach and an outstanding state resource water, so habitat and hydrography are important.
11) Site Map. Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by notes on the Erosion Control sheets or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.
12) Potential sources of pollutants. The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

2.0 SEDIMENT AND EROSION CONTROL MEASURES.

2.1 Erosion Control Sheets. Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and the areas that drain to each discharge point. Project managers and designers will analyze the DDAs and identify Best Management Practices

(BMPs) that are site specific. These site specific BMPs are shown on the Erosion Control sheets. The balance of the standard BMPs for the project will be listed in the bid documents for selection and use by the contractor on the project with approval by the resident engineer.

Projects that do not have DDAs annotated on the erosion control sheets will employ the same concepts for development and managing BMP plans.

The following non-structural BMPs will be implemented throughout the project duration:

- Sediment control BMPs will be maintained when the sediment reaches 1/3 the depth of the BMP.
- Appropriate stock of ECB shall be available onsite at all times.
- ECB shall be applied within 24 hours of the cessation of the land disturbing activity.
- Disturbed areas shall be stabilized prior to a rain event.
- EPSC/SWPPP inspections shall be performed at least twice a week and within 24 hours of a 0.5" or greater rain event.

2.2 Annotations. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMPs shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDAs as the work progresses. <u>All DDAs will have adequate BMPs in place before being disturbed.</u>

2.3 Disturbed Drainage Areas. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:

A) Construction Access. This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with temporary mulch and/or vegetation and a designated construction entrance will be installed.

B) Sources. At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.

C) Clearing and Grubbing. The following BMPs will be considered and used where appropriate.

1) Leaving areas undisturbed when possible.
2) Silt Basins to provide silt volume for large areas.
3) Silt Traps Type A for small areas.

4) Silt Traps Type C in front of existing and drop inlets which are to be saved.
5) Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
6) Brush and/or other barriers to slow and/or divert runoff.
7) Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
8) Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
9) Non-standard or innovative methods.

At the beginning of the clearing and grubbing, the Contractor will stabilize the Whippoorwill Creek banks per the Erosion Control sheets.

D) Cut and Fill and Placement of Drainage Structures. The BMP Plan will be modified to show additional BMPs such as:

1) Silt Traps Type B in ditches and/or drainways as they are completed.
2) Silt Traps Type C in front of pipes after they are placed.
3) Channel Lining
4) Erosion Control Blanket
5) Temporary Mulch and/or seeding for areas where construction activities will be ceased for one day or more.
6) Non-standard or innovative methods.

The Contractor will install the sedimentation basins per the Erosion Control sheets.

E) Profile and X-Section in Place. The BMP Plan will be modified to show elimination of BMPs which had to be removed and the addition of new BMPs as the roadway was shaped. Probable changes include:

1) Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.
2) Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
3) Additional Channel Lining and/or Erosion Control Blanket.
4) Straw ECB for areas where Permanent Seeding and Protection cannot be done within one day.

F) Finish Work (Paving, Seeding, Protect, etc.). A final BMP Plan will result from modifications during this phase of construction. Probable changes include:

1) Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMPs which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
2) Permanent Seeding and Protection.
3) Placing Sod.
4) Planting trees and/or shrubs where they are included in the project.

G) Post Construction. BMPs including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMPs to be installed during

construction to control the pollutants in storm water discharges that will occur after construction has been completed are:

- Turf reinforcement mats: TRMs will be used in areas of concentrated flow within the project limits.
- Bank stabilization with channel lining and container plantings: The existing right bank will likely become unstable when the bridge pier is installed, so the right bank will be stabilized with channel lining and live container plantings. Container plantings will be used for summer planting to ensure survivability. The channel lining will provide short-term stabilization and the plantings will provide long-term stabilization. The main planting selection criteria were whether the plantings were native species and that they did not get any taller than about 20 feet to prevent any concerns with limbs falling onto the road.
- Bank stabilization with live stakings: The existing left bank of Whippoorwill Creek within the project area is incised and unstable. The banks will be stabilized by sloping them back at about a 2:1 slope, seeding and mulching, and covering with an erosion control blanket. This will provide temporary stabilization. During the early spring, live stakes will also be placed to provide for long-term stabilization. The main vegetation selection criteria were whether the stakes were native species and that they did not get any taller than about 20 feet to prevent any concerns with limbs falling onto the road.
- Bank stabilization under the new bridge: Because vegetation will not grow well under the new bridge due to lack of sunlight, the banks will be stabilized with channel lining.
- Enhanced silt trap: The flow from north of the new road and west of the bridge will be handled with a series of enhanced silt traps. These will be used to control grade, reduce velocity, and capture silt from headwaters before reaching Whippoorwill Creek.

3.0 OTHER CONTROL MEASURES.

1) Solid Materials. No solid materials, including building materials, shall be discharged to waters of the Commonwealth, except as authorized by a Section 404 permit.
2) Waste Materials. All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal. Wastes will be disposed in accordance with appropriate regulations. Notices stating these practices will be posted in the office.
3) Hazardous Waste. All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. The contractor shall notify the Resident Engineer if there are any hazardous wastes being generated at the project

site and how these wastes are being managed. Site personnel will be instructed with regard to proper storage and handling of hazardous wastes when required. The Transportation Cabinet will file for generator, registration when appropriate, with the Division of Waste Management and advise the contractor regarding waste management requirements.

4) Spill Prevention. The following material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff. (3)

3.1 Good Housekeeping. The following good housekeeping practices will be followed onsite during the construction project.

1) An effort will be made to store only enough product required to do the job.
2) All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
3) Products will be kept in their original containers with the original manufacturer's label.
4) Substances will not be mixed with one another unless recommended by the manufacturer.
5) Whenever possible, all of the product will be used up before disposing of the container.
6) Manufacturers' recommendations for proper use and disposal will be followed.
7) The site contractor will inspect daily to ensure proper use and disposal of materials onsite.

3.2 Hazardous Products. These practices will be used to reduce the risks associated with any and all hazardous materials.

1) Products will be kept in original containers unless they are not re-sealable.
2) Original labels and material safety data sheets (MSDS) will be reviewed and retained.
3) Contractor will follow procedures recommended by the manufacturer when handling hazardous materials.
4) If surplus product must be disposed of, manufacturers' or state/local recommended methods for proper disposal will be followed.

3.3 The following product-specific practices will be followed onsite:

A) Petroleum Products. Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather.

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

This project (will / will not) (3) have over 1,320 gallons of petroleum products with a total capacity, sum of all containers 55 gallon capacity and larger.

B) Fertilizers. Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will be covered with mulch or blankets or worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

C) Paints. All containers will be tightly sealed and stored indoors or under roof when not being used. Excess paint or paint wash water will not be discharged to the drainage or storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

D) Concrete Truck Washout. Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen wash basin will be excavated away from ditches to receive the wash water.

E) Spill Control Practices. In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

1) Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
2) Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.
3) All spills will be cleaned up immediately after discovery.
4) The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
5) Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
6) The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
7) Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations. Spills will be addressed in the "dry", and will not be "washed away" to clean.

4.0 OTHER STATE AND LOCAL PLANS. This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or

technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials.

5.0 MAINTENANCE. The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.

Maintenance of BMPs during construction shall be a result of twice a week and post rain event inspections with action being taken by the contractor to correct deficiencies within three business days.

Post-construction BMP maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. Post-construction BMP maintenance will be covered in the Cabinet's sMS4 permit under MCM 5 activities.

6.0 INSPECTIONS. Inspection and maintenance practices that will be used to maintain erosion and sediment controls include the following:

1) All erosion prevention and sediment control measures will be inspected by the Contractor at least twice each week and within 24 hours of any rain event of one-half inch or more.
2) Inspections will be conducted by individuals that have received Kentucky Erosion Prevention and Sediment Control (KEPSC) training or other qualification as prescribed by the Cabinet that includes instruction relating to erosion prevention and sediment control.
3) Inspection reports will be written, signed, dated, and kept on file.
4) Temporary stabilization of disturbed areas shall be performed within 24 hours of the cessation of the land disturbing activity.
5) Disturbed areas shall be stabilized prior to a rain event.
6) Sediment control BMPs will be maintained when the sediment reaches 1/3 the depth of the BMP.
7) All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported and completed within three days.
8) Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
9) Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
10) Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
11) All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.

7.0 NON-STORM WATER DISCHARGES. It is expected that non-storm water discharges may occur from the site during the construction period. Examples of non-storm water discharges include:

1) Water from water line flushings.
2) Water form cleaning concrete trucks and equipment.
3) Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
4) Uncontaminated groundwater and rain water (from dewatering during excavation).

All non-storm water discharges will be directed to one of the sediment basins or to a filter fence enclosure in a flat vegetated infiltration area or be filtered via another approved commercial product.

8.0 GROUNDWATER PROTECTION PLAN.

This plan serves as the groundwater protection plan as required by 401 KAR 5:037.

Contractor's statement: (3)

The following activities, as enumerated by 401 KAR 5:037 Section 2, require the preparation and implementation of a groundwater protection plan, and will or may be conducted as part of this construction project: (2)

_____ (e) Land treatment or land disposal of a pollutant;

_____ (f) Storing, treating, disposing, or related handling of hazardous waste, solid waste or special waste, or special waste in landfills, incinerators, surface impoundments, tanks, drums, or other containers, or in piles, (This does not include wastes managed in a container placed for collection and removal of municipal solid waste for disposal off site);

_____ (g) Handling of materials in bulk quantities (equal or greater than 55 gallons or 100 pounds net dry weight transported held in an individual container) that, if released to the environment, would be a pollutant;

_____ (j) Storing or related handling of road oils, dust suppressants, or deicing agents at a central location;

_____ (k) Application or related handling of road oils, dust suppressants or deicing materials, (does not include use of chloride-based deicing materials applied to roads or parking lots);

_____ (m) Installation, construction, operation, or abandonment of wells, bore holes, or core holes, (this does not include bore holes for the purpose of explosive demolition);

Or, check the following only if there are no qualifying activities

_____ There are no activities for this project as listed in 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan.

The Contractor is responsible for the preparation of a plan that addresses the 401 KAR 5:037 Section 3. (3)

Elements of a site specific groundwater protection plan include:

(a) General information about the project: provided in the Project information;
(b) Activities that require a groundwater protection plan: identified above;
(c) Practices that will protect groundwater from pollution: provided in Section 3 – Other Control Measures.
(d) Implementation schedule – all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
(e) Training: all employees of the contractor, sub-contractor and construction inspection personnel will be trained to understand the nature and requirements of this plan as they pertain to their job function(s). Training will be accomplished within one week of employment and annually thereafter. A record of training will be maintained by the contractor with a copy provide to the resident engineer.
(f) Groundwater plan activities will be inspected during the EPSC inspections.
(g) Certification (see signature page.)

Contractor and Resident Engineer Plan Certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Contractor and Resident Engineer Certification:

(3)
Signed _____ title _____ , _____
typed or printed name[1] *signature*

(2)
Signed _____ title _____ , _____
typed or printed name[2] *signature*

1. *Contractors Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 300 Fair Oaks Lane, Frankfort Kentucky 40601. Reference the Contract ID number and KPDES number when one has been issued.*

2. *KYTC Note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 300 Fair Oaks Lane, Frankfort Kentucky 40601. Reference the Contract ID number and KPDES number when one has been issued.*

Sub-Contractor Certification

The following sub-contractor shall be made aware of the BMP plan and shall be responsible for implementation of BMPs identified in this plan as follows:

Subcontractor Name:

Address:

Phone:

The part of BMP plan this subcontractor is responsible to implement is:

I certify under penalty of law that I understand the terms and conditions of the general Kentucky Pollutant Discharge Elimination System permit that authorizes the storm water discharges, the BMP plan that has been developed to manage the quality of water to be discharged as a result of storm events associated with the construction site activity and management of non-storm water pollutant sources identified as part of this certification.

Signed _____ title _____ , _____
typed or printed name[1] *signature*

1. *Sub Contractor Note: To be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 300 Fair Oaks Lane, Frankfort Kentucky 40601. Reference the Contract ID number and KPDES number when one has been issued.*

COUNTY OF	ITEM NO.	SHEET NO.
LOGAN	3-1066	RR

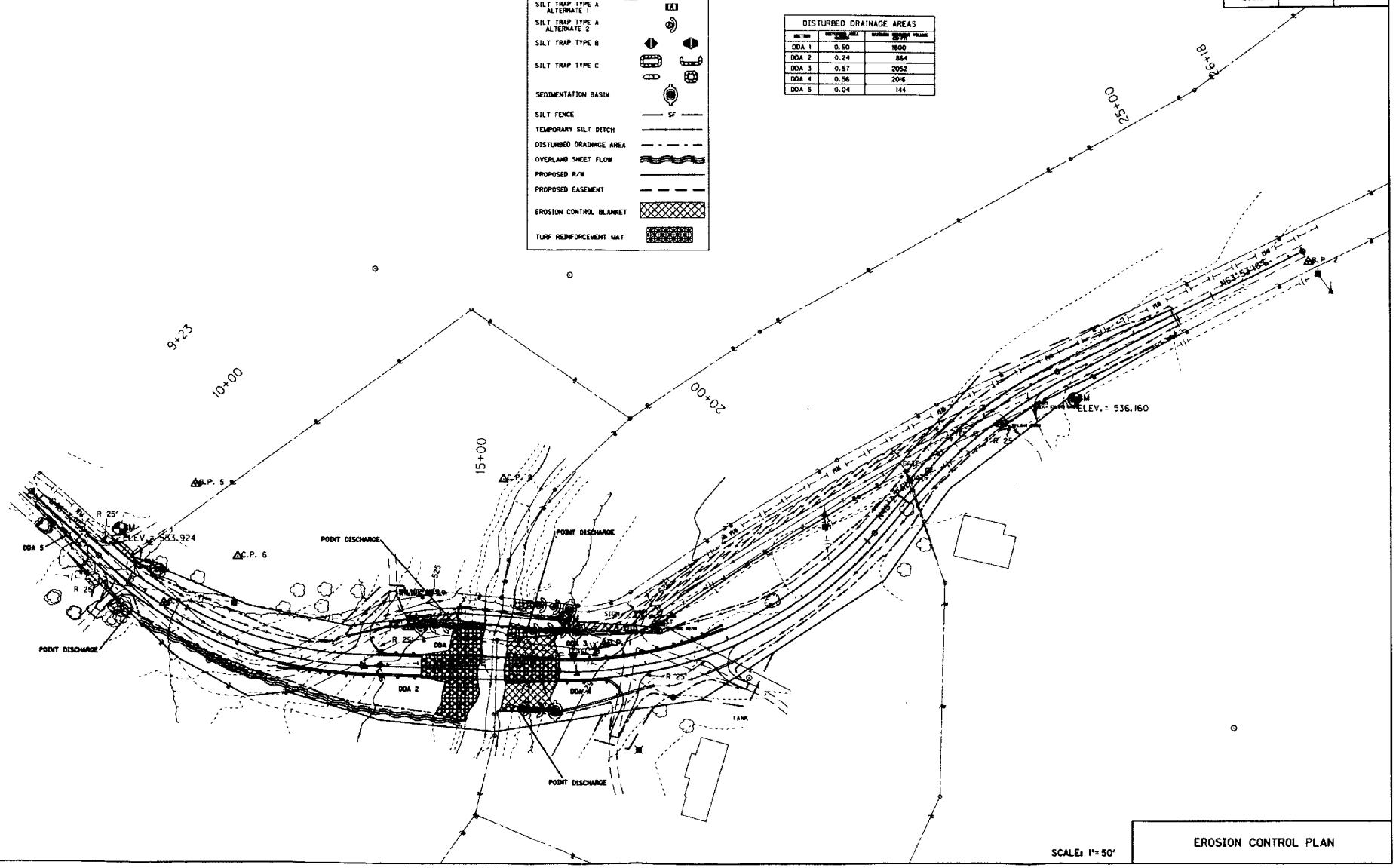
PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

EROSION CONTROL LEGEND

- SILT TRAP TYPE A ALTERNATE 1
- SILT TRAP TYPE A ALTERNATE 2
- SILT TRAP TYPE B
- SILT TRAP TYPE C
- SEDIMENTATION BASIN
- SILT FENCE — SF —
- TEMPORARY SILT DITCH
- DISTURBED DRAINAGE AREA
- OVERLAND SHEET FLOW
- PROPOSED R/W
- PROPOSED EASEMENT
- EROSION CONTROL BLANKET
- TURF REINFORCEMENT MAT

DISTURBED DRAINAGE AREAS

SECTION	DISTURBED AREA (ACRES)	DRAINAGE DISTRICT VOLUME (CU FT)
DDA 1	0.50	1800
DDA 2	0.24	864
DDA 3	0.57	2052
DDA 4	0.56	2016
DDA 5	0.04	144



SCALE: 1"= 50'

EROSION CONTROL PLAN

USER: ####USER####
DATE: ####DATE####
FILE NAME: ####designafile#specification####
E-SHEET NAME:

TRANSPORTATION CABINET
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Steven L. Beshear
Governor

Joseph W. Prather
Secretary

June 8, 2009

Mr. Allen Ingram
Department of Environmental Protection
Division of Water
200 Fair Oaks Lane
Frankfort, Kentucky 40601

Re: Individual Permit Application for Bridge Replacement over Whippoorwill Creek on CR 5280 in Logan County

Dear Mr. Ingram:

The Kentucky Transportation Cabinet is pleased to submit this application package for an individual construction stormwater permit for the replacement of the CR 5280 Bridge over Whippoorwill Creek in Logan County. An individual permit is needed because Whippoorwill Creek is classified as a "special use water" and more specifically an "exceptional water", "outstanding state water" and "reference reach water", as shown in 401 KAR 10:030. The special use water classification of Whippoorwill Creek has influenced our EPSC and post-construction measures as detailed in this application package.

This individual permit application package includes KPDES Form 1, KPDES Form F, KPDES Individual Permit supplemental data, and a Kentucky Transportation Cabinet Best Management Practice Plan, as agreed upon.

If you should have any questions regarding this application or its contents, please contact either Dave Harmon at 502-564-7250 or John Ricketts of Stantec at 859-422-3021.

Sincerely,

David M. Waldner, P.E., Director
Division of Environmental Analysis

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Kentucky Ecological Services Field Office
330 West Broadway, Suite 265
Frankfort, Kentucky 40601
(502) 695-0468

February 18, 2009

Mr. David Waldner
Division of Environmental Analysis
Kentucky Transportation Cabinet
200 Mero Street
Frankfort, Kentucky 40622

Re: FWS 2008-B-0684; KYTC Item No. 3-1066, CR-1280 Bridge Replacement over Whippoorwill Creek; Logan County, Kentucky

Dear Mr. Waldner:

Fish and Wildlife Service (Service) personnel have reviewed the biological assessment and addendum dated October 31, 2008 regarding the gray bat, Indiana bat, littlewing pearly mussel, fanshell, ring pink, slabside pearly mussel, and fluted kidneyshell for the above referenced project proposal. Fish and Wildlife Service (Service) biologists have reviewed the additional information, and offer the following comments .

The biological assessment is adequate and supports the conclusion of "not likely to adversely affect" for the aforementioned species. Based on our review of the information, we concur with this determination. Please ensure that the minimization measures associated with gray bat foraging habitat, found within the addendum, are fully implemented. In view of this, we believe that the requirements of Section 7 of the Endangered Species Act (Act) have been fulfilled. However, obligations under Section 7 of the Act must be reconsidered if: (1) new information reveals that the proposed action may affect listed species in a manner or to an extent not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered in this biological assessment, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

If you have any questions or if we can be of further assistance, please contact Phil DeGarmo at 502-695-0468 x110.

Sincerely,

for Virgil Lee Andrews, Jr.
Field Supervisor